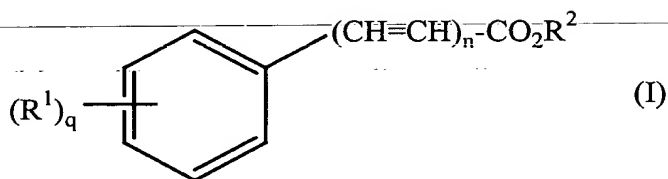


a safe skin-tolerant ester sunscreen of formula (I):



wherein R¹ is hydrogen, lower alkyl, lower alkoxy, halide, hydroxy or NR³R⁴;

R² is a C₆ to C₁₈ alkyl,

R³ and R⁴ are each independently hydrogen, lower alkyl or R³ and R⁴ together with the nitrogen atom to which they are attached form a 5- or 6-membered heterocyclic ring;

n is 0 or 1, and

q is 1 or 2,

wherein when n is 0 and R¹ is NR³R⁴, then NR³R⁴ is para-substituted.

40. A drug delivery system according to claim 39, wherein said ester is a C₈ to C₁₈ alkyl para-aminobenzoate, C₈ to C₁₈ alkyl dimethyl-para-aminobenzoate, C₈ to C₁₈ alkyl cinnamate, C₈ to C₁₈ alkyl methoxycinnamate or C₈ to C₁₈ alkyl salicylate.

41. A drug delivery system according to claim 40, wherein said ester is octyl dimethyl-para-aminobenzoate, octyl para-methoxycinnamate or octyl salicylate.

42. A drug delivery system according to claim 39, further comprising a pharmaceutical compounding agent, co-solvent, surfactant, emulsifier, antioxidant, preservative, stabiliser, diluent or a mixture of two or more of said components.

43. A transdermal drug delivery system as claimed in claim 39, further comprising at least one volatile liquid.

44. A non-occlusive, percutaneous or transdermal drug delivery system which comprises:

(i) a therapeutically effective amount of at least one physiologically active agent or prodrug thereof;

(ii) at least one dermal penetration enhancer, which is present in an amount of from 10 to 10,000 wt% based on the weight of the active agent or prodrug thereof;

(iii) at least one volatile liquid present in an amount to act as a vehicle for the active agent and penetration enhancer;
wherein:

the dermal penetration enhancer (A) is adapted to transport the physiologically active agent across a dermal surface or mucosal membrane of an animal, when the volatile liquid evaporates, to form a reservoir or depot of a mixture comprising the penetration enhancer and the physiologically active agent within said surface or membrane, and (B) is of low toxicity to, and is tolerated by, the dermal surface or mucosal membrane of the animal; and,

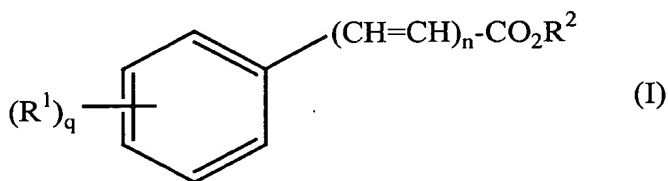
after application of the system to an area of the dermal surface or mucosal membrane, the area becomes touch-dry within 3 minutes of application.

45. A drug delivery system according to claim 44, wherein the drug delivery system is not supersaturated with respect to the physiologically active agent.

46. A drug delivery system according to claim 44, wherein the dermal surface or mucosal membrane becomes touch-dry within 1 minute of application.

47. A drug delivery system according to claim 44, wherein the dermal penetration enhancer is a safe skin tolerant sunscreen.

48. A drug delivery system according to claim 44, wherein said ester is of formula (I):



wherein R¹ is hydrogen, lower alkyl, lower alkoxy, halide, hydroxy or NR³R⁴;
R² is a long chain alkyl;
R³ and R⁴ are each independently hydrogen, lower alkyl or R³ and R⁴ together with the nitrogen atom to which they are attached form a 5- or 6-membered heterocyclic ring;
n is 0 or 1; and
q is 1 or 2.

49. A drug delivery system according to claim 44, wherein said ester is a long chain alkyl para-aminobenzoate, long chain alkyl dimethyl-para-aminobenzoate, long chain alkyl cinnamate, long chain alkyl methoxycinnamate or long chain alkyl salicylate.

50. A drug delivery system according to claim 49, wherein said ester is octyl dimethyl-para-aminobenzoate, octyl para-methoxycinnamate or octyl salicylate.

51. A drug delivery system according to claim 44, wherein the volatile liquid is ethanol or isopropanol.

52. A drug delivery system according to claim 39 or claim 44, wherein the physiologically active agent is a steroid, hormone derivative, non-steroidal anti-inflammatory drug, opioid analgesic, antinauseant, antioestrogen, aromatase inhibitor, 5-alpha reductase inhibitor, anxiolytic, prostaglandin, anti-viral drug, anti-migraine compound, antihypertensive agent, anti-malarial compound, bronchodilator, anti-depressant, anti-Alzheimer's agent, neuroleptic and antipsychotic agent, anti-Parkinson's agent, anti-androgen or anorectic agent.

53. A drug delivery system according to claim 39 or claim 44, wherein the physiologically active agent is testosterone, oestradiol, ethinyloestradiol, progesterone, norethisterone-acetate, ibuprofen, ketoprofen, flurbiprofen, naproxen, diclofenac, fentanyl, buprenorphine, scopolamine, prochlorperazine, metochlopramide, ondansetron, tamoxifen, epitiostanol, exemestane, 4-hydroxy-androstenedione and its derivatives, finasteride, turosteride, LY191704, MK-306, alprazolam, alprostadiol, prostacyclin and its derivatives, melatonin, n-docosanol, tromantadine, lipophilic pro-drugs of acyclovir, low molecular weight heparin, enoxaparin, sumatriptan, amlodipine, nitrendipine, primaquine, minoxidil, minoxidil pro-drugs, pilocarpine, salbutamol, terbutaline, salmeterol, ibogaine, bupropion, rolipram, tacrine, fluphenazine, haloperidol, N-0923, cyproterone acetate or mazindol.

54. A drug delivery system according to claim 44, wherein the system is applied to the dermal surface by an aerosol, as a spray.

55. A drug delivery system according to claim 54, wherein the aerosol is a fixed or variable metered dose aerosol.

56. A drug delivery system according to claim 44, further comprising a pharmaceutical compounding agent, co-solvent, surfactant, emulsifier, antioxidant, preservative, stabiliser, diluent or a mixture of two or more of said components.

57. A method for administering at least one systemic or locally acting physiologically active agent or prodrug thereof to an animal which comprises applying an effective amount of the physiologically active agent in the form of a drug delivery system according to claim 39 or claim 44 to a dermal surface or mucosal membrane of said animal.

58. A method for the treatment or prophylaxis of a disease or condition in an animal which comprises administering to a dermal surface or mucosal membrane of said animal in need of such treatment a therapeutically effective amount of the drug delivery system according to claim 39 or claim 44 to a dermal surface or mucosal membrane of said animal.

59. A method according to claim 58, wherein the disease or condition requires male hormone replacement in testosterone deficient hypogonadal men, female hormone replacement therapy for postmenopausal women, androgen replacement therapy for females lacking libido, male contraception or female contraception.

60. A method according to claim 58, wherein the disease or condition is soft tissue injury, narcotic withdrawal, severe post-operative pain, motion sickness, oestrogen dependent breast cancer, prostatic enlargement and/or prostatic cancer, alopecia and acne, anxiety disorders, male impotence, Raynaud's syndrome and varicose veins, sleep disorders, jetlag, herpes virus infections, deep vein thrombosis, migraine, high blood pressure, malaria, diagnosis of cystic fibrosis, asthma or nocturnal asthma.

61. A method according to claim 57, wherein the animal is a human.

62. A transdermal drug delivery system according to claim 39 that further comprises at least one volatile liquid present in an amount to act as a vehicle for the active agent and penetration enhancer.